



INTERMOUNTAIN POWER SERVICE CORPORATION

April 30, 2004

Mr. Richard Sprott, Director
Division of Air Quality
Department of Environmental Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820

Attention: Debbie Olson, Compliance Section

Dear Director Sprott:

IPSC PSD Compliance Report

The Intermountain Power Service Corporation (IPSC) is herein providing information to show compliance with federally enforceable limits set as conditions within our applicable Title V operating permits and approval orders (AO). This report is required by the following conditions that were effective during the reporting period:

AO DAQE-049-02, Condition 25

Title V Operating Permit #2700010001 (4/10/2002), Condition II.B.2.f

Title V Operating Permit #2700010002 (8/8/2003), Condition II.B.2.f

AO DAQE-AN0327009-04, Condition 25

These conditions require IPSC to show that there were no significant emission increases of pollutants regulated under Prevention of Significant Deterioration (PSD) rules that were attributable to modifications performed by IPSC pursuant to the above Approval Orders. The specific PSD requirement implemented by these permits is promulgated as the "WEPCO" rule (40CFR52.21), which requires comparisons of emissions before and after source modifications.

IPSC is to report annual compliance beginning after the first year IPSC begins to fully utilize the modifications, based upon a rolling 12 month total. IPSC performed a portion of the approved modifications to the Intermountain Generating Station's (IGS) Unit 2 in March 2002. IPSC did not begin fully utilizing those modifications until April 2004. However, since IPSC did operate Unit 2 partially utilizing those modifications, IPSC has been tracking compliance under the permit conditions above. The first full 12 month Unit 2 operating period ended March 2003. The first full year of rolling 12 month periods ended March 2004. Thus, this report covers that first full compliance year for Unit Two.

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Modifications to IGS Unit 1 were performed in March 2003, which were fully utilized beginning April 2003. The first full 12 month Unit 1 operating period ended March 2004. The first report for Unit 1 first full year of 12 month rolling totals ends March 2005. However, IPSC is providing that one rolling 12-month compliance period in this report for consistency in reporting.

Compliance Provisions

In order to avoid PSD major modification permitting, a modification cannot result in significant emission increases. Under the WEPCO rule, modifications can be permitted as minor if the permittee can represent projections that, all other things equal, post modification actual emissions are predicted to be less than significant increases from the actual emissions prior to the proposed change. IPSC followed this requirement when obtaining the approval to make the permitted modifications.

To show compliance with the WEPCO rule after the modifications have occurred, IPSC must compare two year actual emissions prior to the modification to actual emissions after the modification. If a significant increase in any PSD pollutant emission attributable to the modification is shown to have occurred, IPSC must then undergo full a PSD major modification process for that pollutant.

WEPCO allows the source to discount those emission increases not attributable to the modification. The permitted modifications affecting emissions at IGS are tied to increased heat input for higher generating capacity. Any emission increases not associated with the change can be excluded from the pre- and post- change emission comparison. These excluded emissions can be from non-modification related parameters such as demand growth, changes in fuel quality, operational variability in overall pollution control efficiency, operating hours, or those emissions that could have been otherwise accommodated during the baseline period. None of the modifications were non-routine replacements to accommodate forced outages. Accordingly, IPSC is not prevented to use changes in hours of operation to exclude emissions from either unit at IGS. (See the EPA policy determination letter to Henry V Nickel on Detroit Edison, 5/23/00.)

IPSC also had the opportunity to "net" out of major PSD permitting by taking creditable contemporaneous emission reductions from other source-wide units. However, IPSC chose not to do this due to the fact that the specific unit modifications allowed direct emission control to prevent significant emission increases due to the changes. In the case of this permitting action, the term "net significant increase" represents the sum of (1) those emissions increased due to the project, and (2) those emission increases and decreases that are creditable and contemporaneous to the project. Since IPSC did not perform netting, this second value is zero.

To drive home the point that netting has not been utilized at this facility, IPSC presents below in Table 1 the raw before and after modification emissions for Unit 2, which has had a full two year modified operation to compare against the two-year pre-change baseline. Note that these

are actual emission decreases or less than significant increases even though Unit 2 is operating at higher capacity (heat input / electrical output) than during the baseline period. Also note that there was no addition of overfire air or burner replacement during this period. The emissions below have not been adjusted for excluded emission increases.

TABLE 1 - Unit 2 Project Emission Comparison

<u>Pollutant</u>	<u>Baseline Emissions</u> <u>(3/1/2000-2/28/2002)</u>	<u>Post change Emissions</u> <u>(4/2002-3/2004)</u>	<u>Difference</u> <u>increase / (decrease)</u>	<u>PSD Significance</u>
Nitrogen Oxides	25,901	24,770	(1,131)	40
Sulfur Oxides	3,918	3,562	(356)	40
Carbon Monoxide	1,333	1,372	39	100
PM	603	469	(134)	25
PM10	584	449	(135)	15
Ozone (VOCs)	12.0	12.3	0.3	40
Sulfuric Acid	8.1	8.4	0.3	7
Beryllium	0.00067	0.00065	(0.00002)	0.0004
Fluorides	10.6	10.9	0.3	3
Lead	0.07	0.07	(0.00)	0.6
Mercury	0.08	0.08	0.00	0.1
Other sulfur compounds	63.4	64.1	0.7	10

NOTE: Values are in tons. These represent those PSD pollutants reasonably expected to be emitted by IGS. Other sulfur compounds include total reduced sulfur and reduced sulfur compounds (TRS/RSC).

Of particular interest is the reduction of over 1000 tons on nitrogen oxide (NOx) emissions without the installation or use of over fire air (OFA) or replacement-in-kind low-NOx burners. This clearly indicates that these types of control changes were not needed for this permitted project to meet the WEPCO actuals to future actuals test.

WEPCO Compliance Analysis

Presented below (Tables 2-16) are the pollutant-by-pollutant compliance determinations as required by permit and the WEPCO rule. These calculations take into consideration the ability to adjust and discount actual emissions by subtracting emission increases from operational differences not attributable to the modifications. These include adjustments for coal quality, control technology variability, hours of operation, or those emissions that could have been

otherwise accommodated during the baseline period. As shown above, these types of adjustments were not necessary to show compliance with the WEPCO test. However, they are allowed by rule and policy and IPSC intends to make adjustments to actual emissions accordingly. On the flip side, for purposes of the permitting modifications tied to the IGS Dense Pack Project, the positive reducing effects for NOx from the use of over fire air must be added back onto the actual compliance period emissions.

Fuel Quality and Control Variability

Variability in coal characteristics has an ultimate impact on emissions. Fuel parameters such as sulfur, nitrogen, volatiles, ash content, and trace metal concentrations influence the rate and form of the respective emitted counterparts. The loading also has an impact on the performance of applicable pollution control devices. For instance, higher loading of inlet sulfur compounds to the wet limestone scrubbers cause a concomitant decrease in overall efficiency when operating at capacity. IPSC has developed from baseline data the relationship of how changes in fuel quality affects emissions, particularly for NOx and SO2. The use of these relationships for discounting certain emission increases are of great interest in that the PSD significance level for these two pollutants are 40 tons per year. For NOx, a 40-ton change from baseline represents a 0.15% fluctuation. For other pollutants, the fluctuation is not as great. For instance, lead emissions would have to increase nine fold to reach significant levels. However, if fuel quality were to become problematic for IGS in the future, similar adjustments to actual emissions would also be made for the other PSD pollutants.

The way IPSC is calculating excluded emissions is based upon the actual operating data from the baseline period. IPSC has developed curve relationships between coal quality and control device response and changes in actual emissions. In practice, IPSC back calculates, based on this relationship, what the emissions for a given pollutant would have been had that particular fuel been used during the baseline period. Operating parameters from the baseline period, such as heat input, are used to make this calculation to ensure it is distinct from emissions that could be attributable to the modification. The difference from what could have been accommodated during the baseline period if this fuel was used and the actual baseline emission rate is those emissions not related to the change, and are therefore excluded, and thus deductible from any emission increase.

Hours of Operation

Nothing in either the Dense Pack Project or the OFA addition affected the forced outage rate for either IGS Units 1 or 2. IPSC has no history of forced outages due to any modifications made in either permitted action. Thus, variability in year to year operating hours is utilized to compare directly that no significant emissions increase from the modifications occurred. As WEPCO dictates, even though the ultimate test is in tons per year comparisons, emissions are reduced to pounds per hour rates, and then calculated back to tons per year using equal hours of operation. This provides a direct measurement indicating any attributable emission increases.

Discounted OFA Control

For purposes of showing WEPCO compliance for the Dense Pack Project, IPSC must discount the beneficial NOx control aspects of the overfire air system. That is, emission decreases provided by OFA must be added back to the actual emissions to show that the Dense Pack Project itself did not cause as significant emissions increase of any pollutant. IPSC has substantial operational data to predict the effect of OFA at modified capacities.

OFA was installed on Unit 1 in March 2003, and was marginally operated until November 2003. This report shows the effects of OFA for that period, and has been added to the actual emissions to show compliance. OFA was installed on Unit 2 in March 2004, and did not start operation until late April 2004, and therefore no OFA considerations are needed for Unit 2 for this report.

WEPCO Compliance Tables

The following tables provided a pollutant-by-pollutant analysis and indicates WEPCO compliance with the permits under which IPSC operates. These are provided in a rolling 12-month basis as required by permitting existing during the reporting period. The current IPSC Title V Operating Permit requires rolling three month (quarterly) compliance, and our next annual report will reflect that accordingly.

We are providing Unit specific data here to clarify that netting has not occurred. However, the PSD provisions at 40 CFR 52.21, of which WEPCO is a subset, clearly state that significant emissions increases are identified first by the source emission changes. WEPCO further dictates, that if a source significant emission increase occurs, a unit specific analysis must be performed at that time to ensure that it was not caused by the permitted modification. IPSC intends to provide it's future annual WEPCO compliance reports on a source basis, except for those years that unit specific significant emission increases are noted.

Although Unit 1 is not technically due for reporting at this time, IPSC is providing it's single rolling 12 month period emissions.

TABLE 2 - Unit 1 Rolling 12 Month WEPCO Compliance for NOx
(For the first 12 month period ending March 2004)

<u>Actual Emissions</u>	<u>Excluded Emissions</u> (fuel quality @ baseline)	<u>OFA Discount Add-back</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
12,786	313	417	13,934	(1,044)

TABLE 3 - Unit 1 Rolling 12 Month WEPCO Compliance for SO₂
 (For the first 12 month period ending March 2004)

<u>Actual Emissions</u>	<u>Excluded Emissions</u> (fuel quality @ baseline)	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
2,029	431	1,943	(344)

TABLE 4 - Unit 1 Rolling 12 Month WEPCO Compliance for PSD
 (For the first 12 month period ending March 2004)

<u>Pollutant</u>	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
CO	748	686	62
PM	251	331	(81)
PM10	239	320	(81)
VOC	6.7	6.2	0.5
Sulfuric Acid	4.5	4.2	0.3
Beryllium	0.0004	0.0006	(0.0002)
Fluorides	6.1	5.4	0.7
Lead	0.04	0.05	(0.01)
Mercury	0.046	0.041	0.006
TRS/RSC	34.8	32.6	2.2

TABLE 5 - Unit 2 Rolling 12 Month WEPCO Compliance for NOx

12 month period ending:	<u>Actual Emissions</u>	<u>Excluded Emissions</u> (fuel quality @ baseline)	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	12776	842	13029	(1095)
Apr - 03	12781	810	13261	(1290)
May - 03	12651	763	13261	(1373)
Jun - 03	12634	730	13261	(1357)
Jul - 03	12687	686	13261	(1260)
Aug - 03	12568	630	13261	(1323)
Sep - 03	12562	570	13261	(1268)
Oct - 03	12490	522	13261	(1293)
Nov - 03	12530	501	13261	(1232)
Dec - 03	12487	523	13261	(1297)
Jan - 03	12479	593	13261	(1375)
Feb - 03	12814	658	13597	(1441)
Mar - 03	11994	645	12608	(1258)

NOTE: Significance level is 40 tons/yr.

TABLE 6 - Unit 2 Rolling 12 Month WEPCO Compliance for SO₂

12 month period ending:	<u>Actual Emissions</u>	<u>Excluded Emissions</u> (fuel quality @ baseline)	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	1769	137	1971	(339)
Apr - 03	1767	79	2006	(318)
May - 03	1768	18	2006	(256)
Jun - 03	1782	0	2006	(224)
Jul - 03	1793	0	2006	(213)
Aug - 03	1760	0	2006	(246)
Sep - 03	1726	0	2006	(281)
Oct - 03	1705	0	2006	(301)
Nov - 03	1706	0	2006	(300)
Dec - 03	1747	0	2006	(259)
Jan - 03	1828	0	2006	(178)
Feb - 03	1908	0	2057	(149)
Mar - 03	1793	0	1907	(115)

NOTE: Significance level is 40 tons/yr.

TABLE 7 - Unit 2 Rolling 12 Month WEPCO Compliance for CO

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	696	671	26
Apr - 03	701	683	18
May - 03	701	683	18
Jun - 03	702	683	20
Jul - 03	704	683	21
Aug - 03	704	683	22
Sep - 03	705	683	22
Oct - 03	704	683	21
Nov - 03	706	683	23
Dec - 03	706	683	24
Jan - 03	708	683	25
Feb - 03	729	700	29
Mar - 03	676	649	27

NOTE: Significance level is 100 tons/yr.

TABLE 8 - Unit 2 Rolling 12 Month WEPCO Compliance for PM

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	222	303	(81)
Apr - 03	228	309	(81)
May - 03	226	309	(83)
Jun - 03	224	309	(85)
Jul - 03	228	309	(81)
Aug - 03	230	309	(79)
Sep - 03	232	309	(76)
Oct - 03	239	309	(70)
Nov - 03	244	309	(65)
Dec - 03	245	309	(64)
Jan - 03	248	309	(61)
Feb - 03	260	317	(56)
Mar - 03	246	294	(47)

NOTE: Significance level is 25 tons/yr.

TABLE 9 - Unit 2 Rolling 12 Month WEPCO Compliance for PM10

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	214	294	(80)
Apr - 03	219	299	(80)
May - 03	217	299	(82)
Jun - 03	215	299	(84)
Jul - 03	219	299	(80)
Aug - 03	220	299	(79)
Sep - 03	222	299	(77)
Oct - 03	229	299	(70)
Nov - 03	233	299	(66)
Dec - 03	233	299	(66)
Jan - 03	236	307	(63)
Feb - 03	248	284	(59)
Mar - 03	235		(49)

NOTE: Significance level is 15 tons/yr.

TABLE 10 - Unit 2 Rolling 12 Month WEPCO Compliance for VOC

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	6.27	6.04	(0.24)
Apr - 03	6.31	6.14	(0.17)
May - 03	6.31	6.14	(0.17)
Jun - 03	6.32	6.14	(0.18)
Jul - 03	6.34	6.14	(0.19)
Aug - 03	6.34	6.14	(0.20)
Sep - 03	6.34	6.14	(0.20)
Oct - 03	6.34	6.14	(0.19)
Nov - 03	6.35	6.14	(0.21)
Dec - 03	6.35	6.14	(0.21)
Jan - 03	6.36	6.14	(0.21)
Feb - 03	6.54	6.30	(0.25)
Mar - 03	6.07	5.84	(0.23)

NOTE: Significance level is 40 tons/yr.

TABLE 11 - Unit 2 Rolling 12 Month WEPCO Compliance for H₂SO₄

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	4.30	4.08	.021
Apr - 03	4.30	4.16	.014
May - 03	4.26	4.16	0.10
Jun - 03	4.28	4.16	0.12
Jul - 03	4.29	4.16	0.14
Aug - 03	4.23	4.16	0.08
Sep - 03	4.18	4.16	0.02
Oct - 03	4.14	4.16	(0.01)
Nov - 03	4.12	4.16	(0.04)
Dec - 03	4.14	4.16	(0.02)
Jan - 03	4.22	4.16	0.07
Feb - 03	4.36	4.26	0.09
Mar - 03	4.10	3.95	0.15

NOTE: Significance level is 7 tons/yr.

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TABLE 12 - Unit 2 Rolling 12 Month WEPCO Compliance for Beryllium

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	0.0003	0.0003	(0.0001)
Apr - 03	0.0003	0.0003	(0.0001)
May - 03	0.0003	0.0003	(0.0001)
Jun - 03	0.0003	0.0003	0.0000
Jul - 03	0.0003	0.0003	0.0000
Aug - 03	0.0003	0.0003	0.0000
Sep - 03	0.0003	0.0003	0.0000
Oct - 03	0.0003	0.0003	0.0000
Nov - 03	0.0003	0.0003	0.0000
Dec - 03	0.0004	0.0003	0.0000
Jan - 03	0.0004	0.0003	0.0000
Feb - 03	0.0004	0.0003	0.0000
Mar - 03	0.0004	0.0003	0.0001

NOTE: Significance level is 0.0004 tons/yr

TABLE 13 - Unit 2 Rolling 12 Month WEPCO Compliance for Fluorides

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	5.35	5.33	0.02
Apr - 03	5.42	5.42	(0.01)
May - 03	5.46	5.42	0.04
Jun - 03	5.51	5.42	0.08
Jul - 03	5.55	5.42	0.13
Aug - 03	5.60	5.42	0.17
Sep - 03	5.63	5.42	0.21
Oct - 03	5.66	5.42	0.24
Nov - 03	5.72	5.42	0.29
Dec - 03	5.75	5.42	0.33
Jan - 03	5.77	5.42	0.35
Feb - 03	5.94	5.42	0.38
Mar - 03	5.51	5.42	0.35

NOTE: Significance level is 3 tons/yr.

TABLE 14 - Unit 2 Rolling 12 Month WEPCO Compliance for Lead

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	0.030	0.036	(0.005)
Apr - 03	0.031	0.036	(0.005)
May - 03	0.032	0.036	(0.004)
Jun - 03	0.033	0.036	(0.003)
Jul - 03	0.034	0.036	(0.003)
Aug - 03	0.034	0.036	(0.002)
Sep - 03	0.035	0.036	(0.002)
Oct - 03	0.036	0.036	(0.000)
Nov - 03	0.037	0.036	0.001
Dec - 03	0.038	0.036	0.002
Jan - 03	0.039	0.036	0.003
Feb - 03	0.041	0.037	0.004
Mar - 03	0.039	0.034	0.004

NOTE: Significance level is 0.6 tons/yr.

TABLE 15 - Unit 2 Rolling 12 Month WEPCO Compliance for Mercury

12 month period ending:	<u>Actual Emissions</u>	<u>Baseline</u> (adjusted for operating hours)	<u>Difference</u> increase / (decrease)
Mar - 03	0.040	0.040	(0.000)
Apr - 03	0.040	0.041	(0.000)
May - 03	0.041	0.041	0.000
Jun - 03	0.042	0.041	0.001
Jul - 03	0.042	0.041	0.001
Aug - 03	0.043	0.041	0.002
Sep - 03	0.043	0.041	0.002
Oct - 03	0.043	0.041	0.002
Nov - 03	0.044	0.041	0.003
Dec - 03	0.044	0.041	0.003
Jan - 03	0.044	0.041	0.003
Feb - 03	0.045	0.042	0.003
Mar - 03	0.042	0.039	0.003

NOTE: Significance level is 0.1 tons/yr.

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TABLE 16 - Unit 2 Rolling 12 Month WEPCO Compliance for TRS/RSC

12 month period ending:	Actual Emissions	Baseline (adjusted for operating hours)	Difference increase / (decrease)
Mar - 03	32.6	31.9	0.7
Apr - 03	32.8	32.4	0.4
May - 03	32.9	32.4	0.4
Jun - 03	32.9	32.4	0.5
Jul - 03	33.0	32.4	0.6
Aug - 03	33.0	32.4	0.6
Sep - 03	33.0	32.4	0.6
Oct - 03	33.0	32.4	0.5
Nov - 03	33.0	32.4	0.6
Dec - 03	33.0	32.4	0.5
Jan - 03	33.0	32.4	0.6
Feb - 03	34.0	33.3	0.6
Mar - 03	31.5	30.9	0.6

NOTE: Significance level is 10 tons/yr. TRS/RSC means combined total reduced sulfur and reduced sulfur compounds.

This completes the report for showing compliance with WEPCO PSD determinations for the IGS Dense Pack modifications. All supporting documentation upon which this compliance report is based is available for review at the IGS site as required by rule and permit.

If you have any questions or clarifications, please contact Mr. Dennis Killian, Superintendent of technical Services and (435) 864-4414, or dennis-k@ipsc.com.

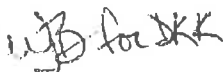
In as much as this notice of intent may affect our Title V Operating Permit, I hereby certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Cordially,



George Cross
President, Chief Operations Officer, and Title V Responsible Official

BP/RJC:jmj



cc: Blaine Ipson, IPSC
James Holtkamp, Holland & Hart
Bruce Harvey, LADWP

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